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EFFECTIVENESS OF THE CIVIL AVIATION SECURITY PROGRAM.(U)

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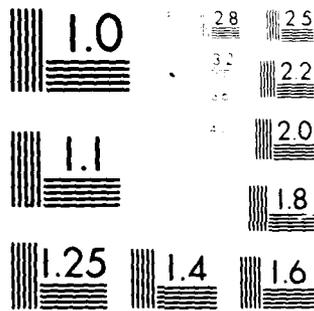
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16. Abstract The report includes an analysis of the current threat against civil aviation along with information regarding hijacking attempts, security incidents, bomb threats, and passenger screening activity. It also summarizes ongoing activities to assure adequate protection of civil air commerce against hijacking/sabotage and related crimes, and other aspects of the Civil Aviation Security Program.					
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First Semi-annual Report to Congress  
on the  
Effectiveness of Passenger Screening Procedures



DEPARTMENT OF TRANSPORTATION  
Federal Aviation Administration  
Civil Aviation Security Service

02 01 154



THE SECRETARY OF TRANSPORTATION  
WASHINGTON, D.C. 20590

April 17, 1975

Honorable Carl Albert  
Speaker of the House of Representatives  
Washington, D.C. 20515

Dear Mr. Speaker:

I am pleased to forward our initial semi-annual Report to Congress concerning the effectiveness of passenger screening procedures. This report is submitted in accordance with Public Law 93-366 signed by the President on August 5, 1974.

A report has also been sent to the President of the Senate.

Sincerely,

/S/

William T. Coleman, Jr.

Enclosure



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THE SECRETARY OF TRANSPORTATION  
WASHINGTON, D.C. 20590

April 17, 1975

Honorable Nelson A. Rockefeller  
President of the Senate  
Washington, D.C. 20510

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/s/

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Enclosure

## FIRST SEMI-ANNUAL REPORT TO CONGRESS

### The Objective

The air transportation security program called for by Public Law 93-366 is administered by the Federal Aviation Administration (FAA) through its Civil Aviation Security Service. The Service, as now organized (see Chart I), was established in July 1974 as an element under the direction of FAA's Associate Administrator for Aviation Safety. This step was taken in recognition of the fact that in civil air commerce security and safety are synonymous. In 1973 there were 247 fatalities related to U.S. air carrier operations. Thirty of those deaths, 12% of the total, were caused by criminal acts. In 1974, 470 deaths were recorded, and 91 or 19% were the result of criminal acts. FAA's objective is reliable, efficient, safe and secure air travel. To achieve this objective the Civil Aviation Security Service has become a vital, integral part of the FAA safety organization, performing an on-going, operational program.

### The Organization

A total of 261 FAA employees, located at 33 Air Transportation Security Field Offices (ATSEFOs), 11 regional offices and the Washington Headquarters, plan, develop and implement the Civil Aviation Security Program, obtain compliance with regulations and evaluate effectiveness. (See Charts I, II and III.) The reduction in 1974 of the number of air carrier violations being investigated reflects the improved performance of security personnel as a result of increased experience and training.

This program, which was initiated in its present form on January 5, 1973, by Federal Aviation Regulations (FARs), requires certain certificated air carriers and airports served by these air carriers to have in effect security measures approved by the Administrator. The regulations are designed to prevent or deter the carriage of weapons, explosives and incendiary devices aboard air carrier aircraft, and to prevent unauthorized access to such aircraft. They also require a number of other measures, all intended to assure a secure airport environment and safe air travel. In short, the civil aviation security program is comprehensive in its scope. But it also is a program of shared responsibilities involving the air carrier, the airport, the Federal Government and the passenger. (See Chart IV.)

More than 6,500 police officers provide law enforcement support to the passenger/carry-on baggage inspection activities of the air carrier employees and agents at approximately 500 air carrier served airports. (See Chart V.) The pre-departure passenger screening procedures now in use resulted in more than 2,400 unauthorized firearms being detected and prevented from going aboard scheduled airliners in the year 1974. There were more than 3,500 persons arrested for violations of law detected during the passenger screening process. (See Chart VI.)

#### The System

In 1972, the year before the implementation of the strengthened security measures, there were 27 hijack attempts against U.S. scheduled air carrier aircraft, 8 of which were successful. Six people lost their lives, including 4 would-be hijackers.

During the first year the FAA Security Regulations were in effect (January 5 - December 31, 1973), no hijacking attempts were made on U.S. scheduled air carriers. During this same period, there were 20 hijackings of foreign aircraft throughout the world. (See Chart VII.) However, in December 1973, a terrorist attack on a United States aircraft at Rome, Italy, took the lives of 30 persons aboard the aircraft including 15 Americans.

The effectiveness of the program, dramatically demonstrated from its inception during 1973, continued in 1974. There were 17 hijackings against foreign scheduled air carrier aircraft throughout the world. But there were only three hijack attempts against U.S. air carrier aircraft, none of which were successful. One attempt involved a man who breached the boarding area by shooting a police officer and forcing his way on board an aircraft for the avowed purpose of crashing the aircraft into the White House. This man killed the co-pilot, wounded the pilot and threatened the lives of passengers. He ultimately lost his own life in his unsuccessful efforts.

A second incident involved a would-be hijacker armed with a shotgun who took two persons hostage at a motel and then brought them to the airport and boarded an aircraft undergoing maintenance. This hijacker fled after being disarmed during a struggle with an airline employee aboard the aircraft. He was captured within hours.

The third incident took place when a passenger entered the cockpit of an aircraft shortly after landing and threatened the pilot, cutting him with a razor and striking him with a fire axe. He demanded a large sum of cash and transportation from the United States. This man was thwarted from hijacking the plane by the actions of the pilot, law enforcement officers who responded to the scene, and the persuasive efforts of an FBI agent.

The following table of available statistics represents comparisons of scheduled airline traffic and hijackings for the rest of the world and for the U.S. during the years of 1969 through 1974.

TOTAL TRAFFIC OF SCHEDULED AIRLINES<sup>1</sup>

	Aircraft Departures (thousands)		Passengers (millions)		Hijacking Attempts	
	World <sup>2</sup>	U.S.	World <sup>2</sup>	U.S.	World <sup>2</sup>	U.S.
1969	4104	5379	132	161	46	40
1970	4374	5099	219	163	50	25
1971	4568	4999	237	174	30	25
1972	4605	5046	258	192	30	27
1973	4824	5132	284 <sup>3</sup>	203 <sup>3</sup>	20	1
1974	--	--	287 <sup>3</sup>	204 <sup>3</sup>	17	3

<sup>1</sup> ICAO Digest of Airline Traffic, 1969-1973

<sup>2</sup> Excluding the U.S.

<sup>3</sup> Estimated

Traffic statistics are used because the number of aircraft departures and passengers carried have a direct relation to the number of opportunities for hijackings to take place. For gross predictive purposes, both traffic statistics and hijacking statistics for the rest of the world are roughly comparable to those of the U.S. for all years except 1973. During 1973, the number of hijackings for the rest of the world dropped from 30 to 20, and those for the U.S. from 27 to 1. Since 1973 was the first full year that the U.S. program was in operation, this dramatic reduction in the number of hijackings in the U.S. can be attributed to that effective program. As the program's technical products (See Charts VIII and IX), including boarding gate and in-flight defenses, were shared with the rest of the world's aviation community, the U.S. antihijacking program may also account for some of the decrease in hijackings among the rest of the world's airlines.

The police officer at the boarding gate is a vital and integral element in the screening program. He (and she) identifies and evaluates the dangerous articles and contraband that may be found during the inspections, makes arrests when appropriate, and gives confidence to the airline employees who are operating the screening system. Their presence adds persuasive credibility to the system; in itself a valuable and effective deterrent to a would-be hijacker. A special training program for these officers was initiated early in 1973 at the Department's Transportation Safety Institute. Through January 1975, over 600 police supervisors have completed the course and returned to their departments to pass on the training to their fellow officers performing the law enforcement work at the airport. The program, which has been funded by the LEAA, is to be expanded and continued to assure that one or more supervisors from all 500 of the nation's air carrier airports receive the training.

The number of hijack attempts prevented or deterred as a result of the civil aviation security system cannot be determined with certainty. However, the number of unauthorized firearms detected at passenger screening points, carried under suspicious circumstances, and the number of individuals being apprehended while attempting to gain access to aircraft indicate that some of these individuals were intent on a hijacking. There are a number of examples of this and it is estimated that more than 25 possible hijacking attempts have been thwarted by security procedures in use in 1974 (See Incidents, Appendix 1).

#### Problems

Program emphasis in the coming year will be directed to resolving two major problems. First, the passenger screening system appears effective, but the security of cargo still poses problems. Explosives, introduced into an aircraft as cargo or checked baggage are an increasing threat. A U.S. aircraft was sabotaged in September 1974 when a bomb which had been placed aboard the aircraft in a cargo compartment exploded during flight. The aircraft crashed into the Ionian Sea and 88 persons were killed. Two weeks earlier there was a low order bomb explosion in the cargo compartment of a jet on a similar flight as it landed in Rome. The fortunate failure of the bomb to fully detonate certainly saved the lives of the aircraft's 89 passengers.

Steps will be taken to thwart the introduction of explosives into aircraft. Significant progress is being made to develop effective explosive detection techniques and devices that can efficiently screen both checked baggage and cargo. Such devices are being put into use, but research to find better and more efficient systems will continue.

Second, the complacency that inevitably follows success must be overcome. FAA specialists will intensify inspection of all phases of the operation to assure compliance on the part of everyone involved with required procedures.

#### Outlook:

Foreign airliners throughout the world are being hijacked. Since December 1973, 212 innocent persons have been killed and 140 more injured as a result of 104 unlawful attacks against civil air commerce. These criminal acts were directed at the air carriers and civil aviation facilities of 41 nations. Final rulemaking is pending on a Federal Aviation Regulation that would require foreign air carriers to adopt security measures similar to those required of U.S. carriers. This proposed regulatory action is consistent with the requirements of Section 315(a) of the Federal Aviation Act of 1958 as amended by P.L. 93-366.

We are all aware that 1974 was a tragic year for the United States in terms of commercial air carrier fatalities. It is a fact that 19 percent, or 91, of the 470 fatalities were the result of hijacking attempts or aircraft sabotage. It is also a fact that there were two explosions on U.S. civil aircraft, seven explosions at U.S. civil aviation facilities, worldwide, and three explosions on foreign air carrier facilities located in the United States. Additionally, six explosive devices were found that had not been detonated, but, constituted a threat to U.S. aircraft or facilities.

These facts, coupled with the arrests and the weapons detected in the U.S. passenger screening process indicate, if anything, that the hijacking/sabotage threat is more severe today and a greater danger to lives and property than before. The civil aviation security program must be continued and it will be strengthened, improved and made more adaptive to the ever changing threat.

Appendix 1

March 15, 1975

EFFECTIVENESS OF PASSENGER SCREENING PROCEDURES

Incidents

The following events represent but a few of the many occurrences during which efforts to gain access to air carrier aircraft by armed persons were prevented.

An escapee from a mental hospital passed through a boarding area, gained access to an air operations area and walked towards an aircraft which had just terminated a flight. The police officer stationed in the area ordered the man to stop and after a struggle the man was apprehended. Although the man was not armed, he stated that he intended to take a plane to Washington using a stewardess as a hostage to straighten things out.

A man drove his automobile through an unlocked gate into an air operations area and parked under the wing of an aircraft which was boarding passengers. The man boarded the aircraft and told a stewardess that the automobile contained explosives and that he was going to steal a ride on the aircraft. Informed that he would have to move his vehicle in order for the aircraft to take off, the man deplaned and was taken into custody.

A man using a gun held a cab driver at gunpoint to obtain an aircraft. The taxi driver's cab was surrounded by police at the airport and the man was overpowered when his attention was diverted.

A man carrying a concealed loaded weapon hidden in the small of his back made five separate attempts to pass through the detection device at a passenger screening station.

A man armed with a knife took a female employee of a realty office located at an airport as a hostage and demanded one million dollars and an airplane. He was shot by the law enforcement officer who was providing airport security in accordance with Federal Aviation Regulations. The officer, incidentally, was a graduate of the FAA aviation security course.

A man impersonating a police officer attempted to pass through a weapons detector with a box of .22 caliber ammunition. He also was found to have a loaded derringer concealed on his person. He was arrested, but when released on bail bond he returned to the airport and was again apprehended at the boarding point armed with a knife. He did not have an airline ticket in his possession.

A man was apprehended in an airport air operations area armed with a .38 caliber revolver, two knives and a flashlight. He said he wanted to go to Hawaii, but had no ticket.

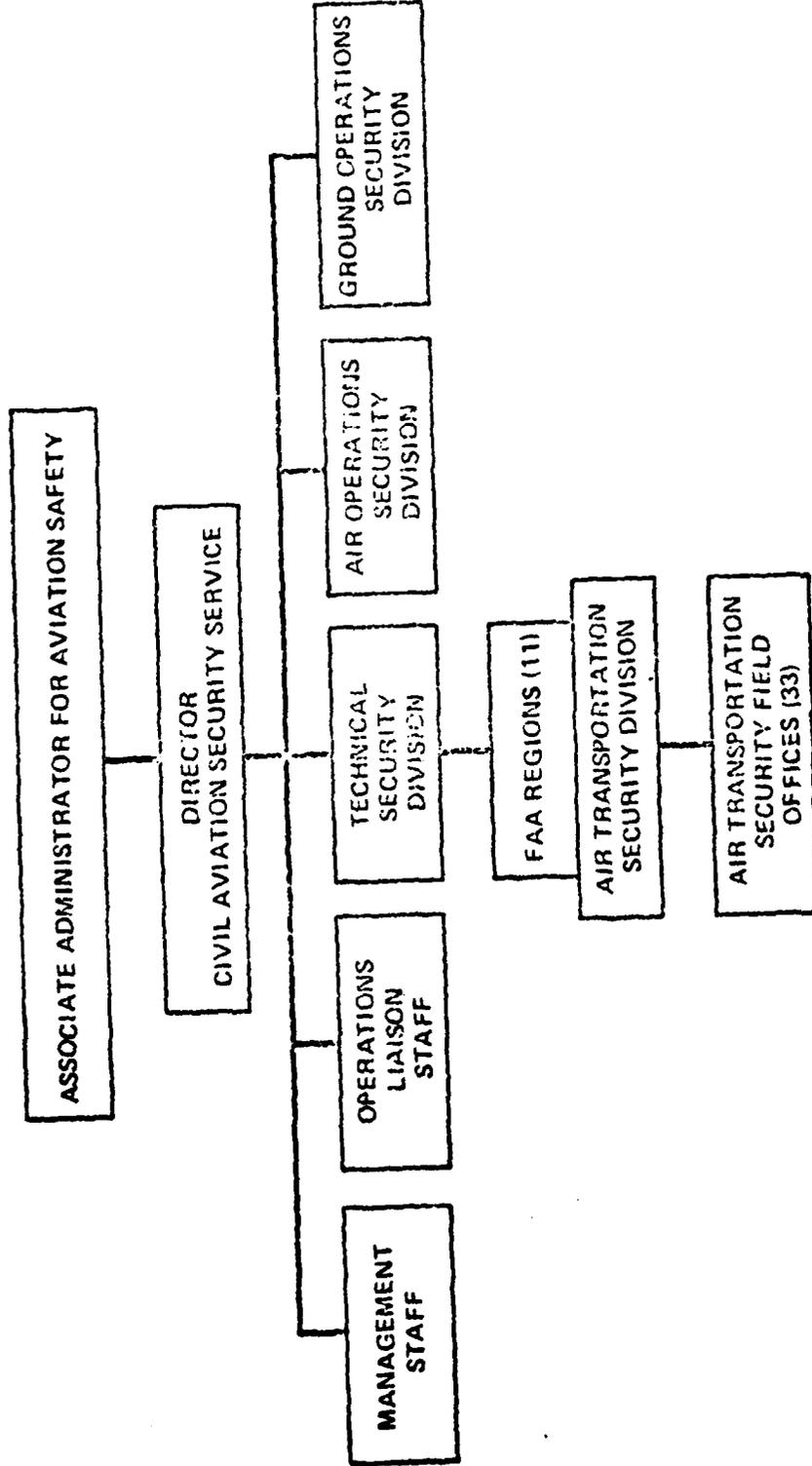
A man without an airline ticket attempted to pass through a secure concourse screening point carrying an attache case. The X-ray detected a revolver in the attache case. The man said he intended to visit an unnamed airline employee on duty in the secure area.

A man, without satisfactory identification, attempted to purchase an airline ticket by check. The airline would not accept the check. Later the man was found hiding in a stairwell near the boarding gate. He was asked to leave the area. He was searched and it was determined he had a concealed weapon. The man indicated he intended to board an aircraft without a ticket.

A woman attempted to board an aircraft carrying a paper bag containing a radio. The X-ray indicated a weapon was in this bag. A physical search revealed that the weapon had been hidden inside the radio.

These occurrences are representative examples and reflect the effectiveness of the security measures presently in use.

# CIVIL AVIATION SECURITY ORGANIZATION AND RELATIONSHIPS



# CIVIL AVIATION SECURITY

## STATISTICAL SUMMARY

<u>REGION/OFFICE</u>	<u>FY-1974</u>	<u>FY-1975</u>	<u>FY-1976</u>
NEW ENGLAND	10	9	9
EASTERN	55	41	41
SOUTHERN	47	34	34
SOUTHWEST	31	24	24
GREAT LAKES	42	30	30
CENTRAL	16	14	14
ROCKY MOUNTAIN	13	11	11
NORTHWEST	14	12	12
WESTERN	43	31	31
ALASKAN	8	7	7
PACIFIC	9	8	8
EUROPEAN	0	0	0
SUB-TOTAL	289	221	221
WASH HEADQUARTERS	44	40	40
TOTAL	333	261	261

COMPARISON OF VIOLATIONS INVESTIGATED

FAR 121,520 VIOLATIONS/INVESTIGATED      1973      1974

ACTIONS TAKEN:

ADMINISTRATIVE CORRECTIONS	193	84
NO ACTION	73	28
CIVIL PENALTY COMPROMISES (AMOUNT)	<u>89 (\$107,800)</u>	<u>9 (\$11,300)</u>
<u>TOTAL INVESTIGATIONS CLOSED:</u>	345	121

FAR 107 VIOLATIONS INVESTIGATED

ACTIONS TAKEN:

ADMINISTRATIVE CORRECTIONS	49	53
NO ACTION	12	13
CIVIL PENALTY COMPROMISES (AMOUNT)	<u>3 (\$1,650)</u>	<u>11 (\$4,750)</u>
<u>TOTAL INVESTIGATIONS CLOSED:</u>	63	77

# CIVIL AVIATION SECURITY BASIC POLICIES

PROGRAM ELEMENT	RESPONSIBILITY	ACTIONS
AIR CARRIERS	SECURE TRAVEL	<ul style="list-style-type: none"> <li>- MAINTAIN RESPONSIVE SECURITY PROGRAMS</li> <li>- SCREEN PASSENGERS, CARRY-ON ITEMS</li> <li>- SECURE BAGGAGE, CARGO PROCEDURES</li> <li>- PROTECT AIRCRAFT</li> </ul>
AIRPORTS	SECURE OPERATING ENVIRONMENT	<ul style="list-style-type: none"> <li>- MAINTAIN RESPONSIVE SECURITY PROGRAMS</li> <li>- PROTECT AIR OPERATIONS AREA</li> <li>- PROVIDE LAW ENFORCEMENT SUPPORT</li> </ul>
FAA	LEADERSHIP	<ul style="list-style-type: none"> <li>- IDENTIFY AND ANALYZE THREATS</li> <li>- PRESCRIBE SECURITY REQUIREMENTS</li> <li>- COORDINATE SECURITY OPERATIONS</li> <li>- PROVIDE TECHNICAL ASSISTANCE</li> <li>- ENFORCE REGULATIONS</li> </ul>
USERS	PROGRAM COSTS	<ul style="list-style-type: none"> <li>- SECURITY FUNDED AS OPERATING COST OF SYSTEM</li> </ul>

**CIVIL AVIATION SECURITY**  
**SCHEDULED AIR CARRIER OPERATIONS**

35	CARRIERS
500	AIRPORTS
2,600	AIRCRAFT
14,500	FLIGHTS PER DAY
550,000	PASSENGERS PER DAY
750,000	ITEMS OF PROPERTY PER DAY

C

CIVIL AVIATION SECURITY

PROGRAM RESULTS -- PASSENGER SCREENING

	<u>1972</u>	<u>1973</u>	<u>1974</u>
<u>PASSENGERS DENIED BOARDING</u>	8265	3439	2663
<u>PERSONS ARRESTED</u>	3658	3156	3501
<u>AVIATION OFFENSES DETECTED:</u>			
CARRYING WEAPONS/EXPLOSIVES ABOARD AIRCRAFT	774	736	1147
GIVING FALSE INFORMATION	244	658	1465
<u>OTHER OFFENSES DETECTED:</u>			
NARCOTICS	1424	465	593
IMMIGRATION AND NATURALIZATION	1152	703	925
OTHER	605	562	679
<u>WEAPONS DETECTED:</u>			
FIREARMS	1313	2162	2450
EXPLOSIVES	13	3459	14,928
KNIVES	10,316	23,290	21,468
OTHER	3203	28,740	28,864

CHART VI

# CIVIL AVIATION SECURITY

## U.S./FOREIGN AIR CARRIER HIJACKINGS

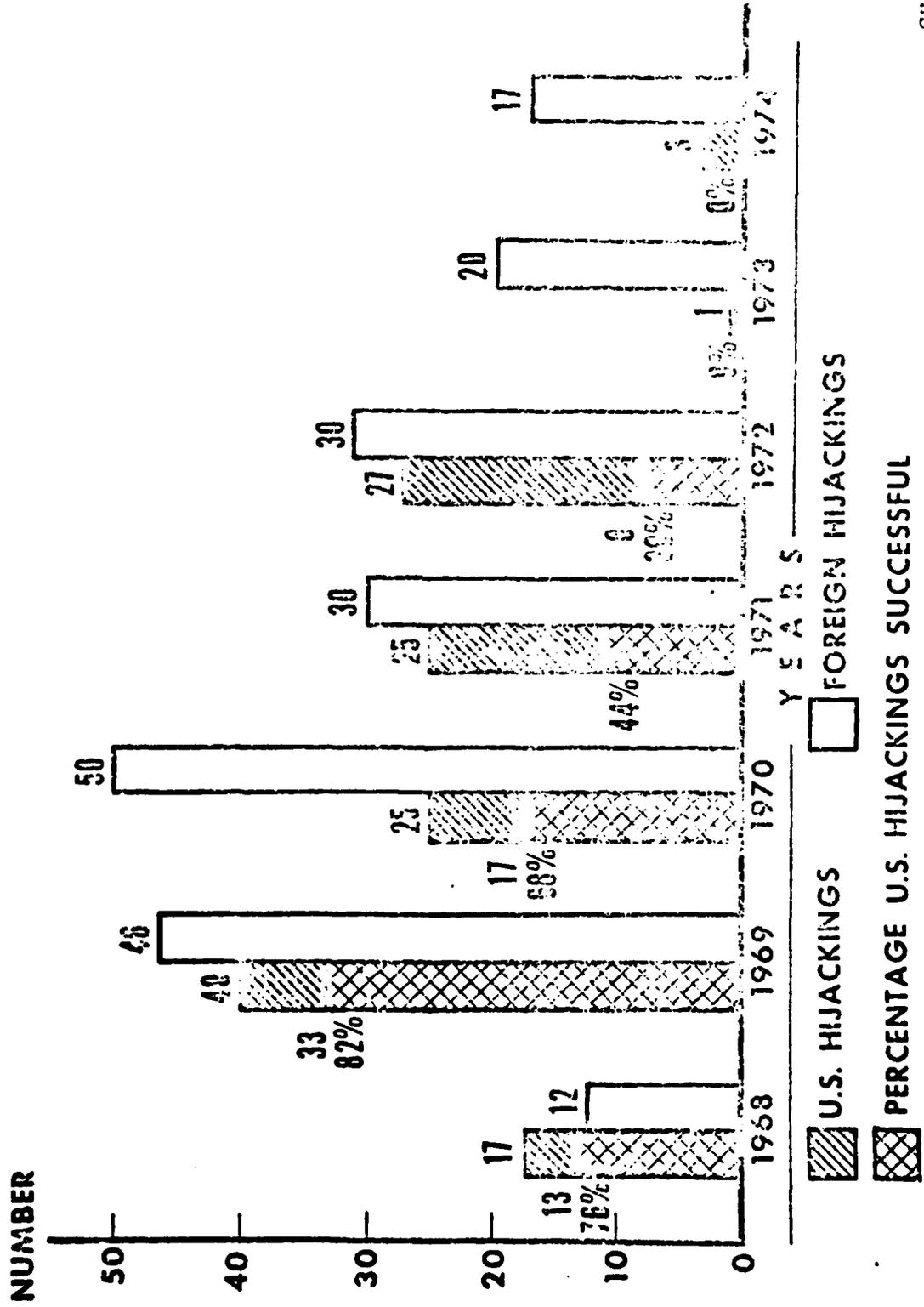


CHART VII

# CIVIL AVIATION SECURITY

## METAL DETECTION DEVICES

<u>TYPE</u>	<u>BASIC CHARACTERISTICS</u>	<u>MANUFACTURER</u>	<u>UNITS</u>
ALK-THRU PASSIVE	MEASURES DEVIATION IN EARTH'S	INFINETICS	182
	MAGNETIC FIELD. DETECTS	SCHONSTEDT	4
	FERROUS METALS ONLY.	TOTAL	<u>186</u>
ALK-THRU ACTIVE	CREATES AND MEASURES DEVIATIONS IN OWN ELECTRIC FIELD. DETECTS BOTH FERROUS AND NON-FERROUS METALS.	RENS	517
		METCR	103
		SPERRY RAND	104
		SOLCO	98
		WESTINGHOUSE	86
		DENSOK	1
	TOTAL	<u>914</u>	
HAND-HELD ACTIVE	COMPARABLE TO WALK-THRU ACTIVE. LIMITED EFFECTIVE RANGE	RENS	230
		FEDERAL	250
		SOLCO	720
	TOTAL	<u>1200</u>	

TOTAL - ALL TYPES - 2300

**CIVIL AVIATION SECURITY**  
**X-RAY BAGGAGE INSPECTION SYSTEMS**

**CHARACTERISTICS:**

SMALL DOSE X-RAY. INTENSIFY IMAGE ELECTRONICALLY.  
DISPLAY ON TV

**OPERATING CRITERIA:**

MEET FDA BRH AND STATE HEALTH STANDARDS  
DISTINGUISH 24 GAUGE WIRE

**LIMITATIONS:**

DEPENDENT ON DILIGENCE OF OPERATORS. DEMANDS  
CONSTANT ATTENTION AND ABILITY TO QUICKLY  
RECOGNIZE DANGEROUS ARTICLE

**SYSTEMS IN USE:**

AMERICAN SCIENCE AND ENGINEERING	64
ASTROPHYSICS	71
BENDIX	80
DENNIS & MILLER	9
PHILIPS ELECTRONIC INSTRUMENTS	35
TOTAL	<u>260</u>

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